

A Process Approach for Selecting ERP Software: The Case of Omega Airlines

Jacques Verville
Texas A&M International University, USA

EXECUTIVE SUMMARY

Omega Airlines, an international air carrier, provides air transportation services for passengers and cargo both to domestic and international arenas. Omega Airline's purchased PeopleSoft's ERP solution (finance, human resources, and payroll applications) for the sum of US\$86 million. The ERP acquisition process that Omega Airline's went through took approximately 9 months and was completed by the summer of 1996. The structure of the acquisition process that emerged from the data revealed six distinctive iterative, recursive and inter-related processes that, together, form a complex web of activity and tasks for the acquisition of ERP software. These activities and tasks are described and analyzed as a function of the six processes. The ERP acquisition process developed by Omega Airlines for this purchase was atypical of their normal purchasing practices and proved to be a significant learning experience for the entire organization. This case provides a useful illustration of 'good practice' and sets forth the framework for the ERP acquisition process.

BACKGROUND

Omega Airlines, a large international carrier, provides air transportation services for passengers and cargo both to domestic and international arenas. Together with its regional partners, Omega Airlines's route network provides transportation services to 125 cities worldwide, including 97 cities in North America and 22 cities in Europe, Asia, the Middle East and the Caribbean. It also provides charter services to six international destinations as well as cargo services to 65 destinations worldwide. Its operations include a large aircraft and

engine maintenance business that provides maintenance services to airlines and other customers. Other services that are also offered include computer and ground handling services to airlines and other customers. Among its holdings, Omega Airlines retains 100% interest in five regional airlines; in one of the largest computer reservation systems; and in a major tour operator. It also holds minority interests in other travel and transportation-related businesses.

By 1995, Omega Airlines's Honeywell-Bull mainframe system was running with hardware and software that was more than ten years old. The system contained information that was extremely important to Omega Airlines's daily operations. With the system due for changes, whether through upgrade, conversion, or replacement, action needed to be taken soon, but how long could Omega Airlines postpone the inevitable without impeding or hindering its operations?

SETTING THE STAGE

In August of 1990, Omega Airlines's Strategic and Technological Planning Group presented the Board of Directors with a request for a 'global' authority for commitment (hereafter referred to as an "AFC", this proof of commitment or sign-off must be obtained from Omega Airlines's Board of Directors and Steering Committee before work can proceed on a project) for a strategy to replace the Honeywell-Bull system. The strategy would involve the replacement of the Honeywell-Bull with an IBM mainframe and the conversion or replacement of more than 5,000 applications that were then executing on the Bull system. The funds requested with this AFC (each AFC represents an allotment of funds that is committed whether to a specific phase of a project or to an entire project), in the amount of US\$36 million, would be used to convert 1,500 Bull programs to the IBM mainframe platform, while the remaining applications would be replaced with new applications under separate projects. (Since the 'Bull Migration Project' actually comprised many projects spanning several years, several AFCs needed to be obtained, in some cases, for each major phase of each project.) The request was approved (Verville, 2000).

Since then, a number of initiatives were undertaken to execute this strategy. The Board subsequently approved the replacement of the revenue accounting system for the Finance Branch and the procurement, inventory management and aircraft maintenance systems for the Technical Operations Branch. These initiatives represented somewhat less than 40% of all the applications that were on the Honeywell-Bull system.

Five years later (1995), more than 60% of the 5,000+ applications still remained (in whole or in part) on the Bull, awaiting conversion or replacement. While various projects involving the initial 1,500 programs were progressing, they had yet to be all delivered, and numerous others still needed to be started. Major upgrades of both hardware and software were needed to support critical applications, such as payroll and the airline schedule. Other major areas included Finance, Human Resources, and Sales Reporting. In the interim, continued maintenance was being provided for the Bull, though without any new enhancements.

Y2K Systems Failures

Up to this point, Omega Airlines had, for the most part, adopted a status quo approach. However, status quo was no longer feasible. In January 1995, the urgency of this situation was escalated when one of the applications on the Bull failed. An investigation into the

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